

LEADING FOR RESULTS, GOVERNING THROUGH TECHNOLOGY

AN AGENDA FOR GOVERNING FROM:





THE COUNCIL OF STATE GOVERNMENTS

WITH THE SUPPORT OF:

















# CITIZEN 2010

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# ABOUT US:



The Center for Digital Government is a national research and advisory institute providing government, industry and education leaders with decision support, research and educational services to help them effectively incorporate new technologies in the 21st century. The Center is a division of e.Republic, the nation's leading publishing, event, and research firm focused exclusively on the public-sector IT market.



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The Council of State Governments is the nation's only organization serving every elected and appointed official in all three branches of each state and territorial government through its national office, as well as regional offices. CSG has championed excellence in state government since 1933 by advocating multi-state shared problem solving and states' rights, by tracking national conditions, trends, and innovations, and through nonpartisan leadership training and support.



A Transition Briefing from the Center for Digital Government and The Council of State Governments

# EXECUTIVE SUMMARY

"Citizen." It was the one-word greeting used by Thomas Jefferson in addressing people in person, in writing or in public speeches. The author of the Declaration of Independence had high hopes for, and expectations of, the citizen during an important moment in the new country's history.

Government now addresses citizens through new means in a new century – at another challenging time in the life of the nation. This briefing, Citizen 2010, takes stock of the first generation of online government services and suggests a path forward in meeting the aspirations of citizens in the opening decade of a new century.

Citizens are choosing to meet their government online. As detailed in this briefing, the use of online government services in the United States now stands at 43 percent, an increase of nine percent in just the last 12 months. In selected program areas, up to 79 percent of users have chosen the Internet over all other channels in accessing government information and services. The advantages to the states are clear – the cost of providing a unit of service on the Internet is as much as 75 percent less than through conventional delivery channels. And these new channels are increasing government capacity by up to 93 percent.

Much has been done. There is much more to do. Now, the leadership opportunity as government finds its footing in the 21st Century is to institutionalize the early wins during the formative years of the e-government experiment, help to further develop the practices around a new way of conducting the public's business, and complete the transition to digital government.

This briefing's theme of "leading for results" recognizes the hard choices faced by government amid revenue shortfalls and international uncertainties. The sister theme of "governing through technology" focuses on efficient and effective ways of realizing the priorities of new administrations, which include:

- Ensuring safe communities
- Enhancing economic vitality
- Preparing a productive workforce
- Improving public health and education
- Safeguarding the well-being of vulnerable children and adults
- Maintaining robust transportation and communication infrastructure
- Protecting and promoting natural resources and recreational opportunities.

In an era of scarce public resources, digital government holds particular promise in helping public entities execute more effectively in producing priority-driven results. There are successes across the 50 states that have transformed major program areas in government that lead the way forward. Those experiences form the basis of this briefing which sets the vision for governing through technology, provides analysis and context for producing results that matter, and concludes with a call to action for completing the transformation to digital government.

#### THE BRIEFING CONSISTS OF THREE MAJOR SECTIONS:

A. The New Civic Engagement (Vision). Digital government is providing a new platform for governing. The relationship between citizens and their government is changing. Citizens are dealing with government at times and locations of their choosing, and they are beginning to use the Internet and other technologies to engage with elected officials and civil servants regarding things they care about. The new seat of government is on the network, and it is the only one that many people will ever know. Just as state capitols reflect the historic values and aspirations of a place and its people, the new public square is the result of deliberate design – and the work of innovative leaders.

#### B. Purpose-Driven Government (Analysis and Context).

Digital government creates new capacity for the delivery of public services. The increased capacity raises three important management issues for government:

(i) Purposeful decisions about whether new capacity is to be used to expand the role of government and the range of government activities in society, or to improve the performance of its existing role and range of services;

- (ii) Whether new performance-management disciplines will be used to assess both continuing and new program and service offerings providing sound policy, operational and cost-benefit justification and accountability for new projects, initiatives and investments; and meaningful measures of results to ensure service-delivery channels are aligned with the administration's priorities; and,
- (iii) In light of the growing demand for public services and the pressure of tightening tax revenues and public budgets, determine whether government will act alone in managing, funding and delivering public services, or will instead provide a platform for changing the way government works through a collaboration strategy that leverages the core competencies and expertise of other organizations, thereby creating cooperative networks of companies, universities, nonprofit organizations and other civic groups to accomplish the larger public-policy goals.
- **C. Toward 2010 (Call to Action).** The ship of state alters course slowly and deliberately. This briefing concludes with recommendations that imagine or anticipate the future, and attempts to work backward from there by defining policy and investment choices that can help move government where it needs to be and citizens say they want to be by 2010.

"Toward 2010" reflects an orientation toward the future, and includes a tactical approach to the first 100 days in office. This future-oriented agenda works hand in glove with actions that can be taken today.

# TODAY (TOP 10 ACTIONS FOR THE FIRST 100 DAYS). An annotated list of priority actions to be done by new public sector leaders:

### 1. Declare Priorities of Administration and its Vision for Technology

Operating agencies and local governments look to the state executive while planning their program and technology investments. A clear articulation of the administration's policy priorities provides an important first step in coordination and potential collaboration. The current environment demands a deliberate strategy to govern during adversity. That is, hard times require hard choices, but they also allow government to make changes that may have been otherwise untenable during earlier, better days. In simple terms, the current environment presents a rare opportunity to assess what government is doing (and the methods it uses), what it will do, what innovative strategies it can adopt for future delivery of services needed by the public, and what it will no longer do.

### 2. Identify the Information Needed to Govern and Manage Effectively

The priorities of the administration, the daily management of government programs, and compliance with federal mandates, require timely access to reliable information.

The sophisticated and secure use of data is at the heart of major new initiatives in healthcare<sup>1</sup>, education accountability<sup>2</sup>, and homeland security, all of which bring renewed urgency to ensure citizen privacy and public accountability.

# 3. Prioritize the Technology Investments that Result in Informed Decision-Making

Budgetary conditions, national security and results-focused accountability in the management of government and education programs create an urgency for technology systems that gather, protect, aggregate, interrogate and ultimately disseminate the data needed for cost-benefit analysis, justification and accountability necessary for program management and oversight, as well as policy decisions, effective service delivery, performance management and results tracking.

### 4. Focus on Acting like One Government

Changing conditions and technologies create opportunities to revisit the balance between computing and network technologies (infrastructure) that should be shared by government as a whole (the enterprise) on one hand, and those initiatives that are properly done by agencies operating autonomously. Older, rigid, stand-alone technology systems can increasingly be brought together through a connective tissue (architecture) among these previously discrete legacy systems.

# 5. Prepare to Manage Public Records Effectively and Responsibly

Digital government enables more effective use of the data held by government – increasing capacity exponentially at incremental cost (compared to achieving the same results by other means). The importance of the underlying purpose – more effective governance – is often discussed only in terms of cost savings or cost avoidance. Effective government must also assess its planned functions and activities in terms of alternative methods and strategies for delivery of services, whether government acting alone is actually best positioned to provide a new initiative, and what the economic impact of direct government-delivered service provisioning will be on competitive markets for such services. A cost-only view misses the benefits realized through increased revenue and better program management.

The impact of improved data flow and expanded use also brings unique stewardship responsibilities related to public records. Governments' policies and practices must protect private or other sensitive data from disclosure, while optimizing its use to meet the mission and mandates of governing – and promoting transparency and open government. Achieving balance among these sometimes-competing interests requires a disciplined policy framework, including but not limited to privacy and security impact statements.

<sup>&</sup>lt;sup>1</sup> Health Insurance Portability and Accountability Act (HIPAA)

<sup>&</sup>lt;sup>2</sup> No Child Left Behind Act

#### 6. Make Key Appointments in Technology, Security and Privacy

The issues faced by government at the dawn of the digital century are not trivial, and require leadership across government to realize the benefits and steer clear of potential pitfalls. For the first time, new governments have the opportunity to appoint agency heads who bring a digital or Internet orientation to the work of government in addition to a deep knowledge and passion for the agency's mission. Broadening the number of agency heads who think digitally is instrumental to creating collaborative and collegial relationships with the state chief information officer (CIO), who remains on point for the coordinated use of technology by government. The use of technology advisory panels has proven effective in getting low- or no-cost access to the best thinking of the private and public sectors, and that of academic institutions and non-profit or community organizations.

Given the importance of security and privacy to government policy and operations, and to complement the state CIO function, a growing number of organizations are naming point people in one or both areas – at both the agency and enterprise levels, with direct reporting relationships to the top of the organizational chart.

#### 7. Focus on Results, Not Processes

Results – citizens expect them and the times require them. The challenge is to make government fit into the lives of citizens and the patterns of business. While important, a process orientation is necessary but not sufficient to achieve the desired results. While important, an administrative or process orientation may lack the process management discipline and analytical focus needed to realize the policy and performance objectives of an open government in an open economy. To successfully arrive at desired results, management processes must focus instead on creating a results-oriented culture of accountability, prioritization on the performance of inherently governmental functions, comparative performance benchmarking of public-private partnerships compared to government acting alone, analysis of the economic impact of governmental action, and a resulting strategy for addressing public needs through optimization of scarce taxpayer funds. There is good reason to pursue priority-driven results in each of the following:

- Government to Citizen: Citizens are now accustomed to self-service, use online government when available, and expect to be in charge of how and when they interact with public agencies. Now is the time to make self-service a habit, institutionalizing a new mainstream in service delivery.
- Government to Business: Businesses and government have shared interest in more effectively managing regulatory compliance a task that has consumed 7.7 billion staff hours by one estimate. Reducing those hours through online services allows that time to be redeemed for high-value activities in the marketplace, public service or the community.

Government to Government: The size and complexity of many parts of government puts a premium on technologies that enable more effective program management, including fraud detection and revenue optimization. As to internal government operations – including accounting, payroll, personnel and procurement – analytical software is turning data into actionable information to help decide allocation levels, optimize staffing levels and aggregate state purchasing power.

### 8. Reward Sharing and Collaboration

Federated environments such as state and local government are characterized by a tendency among agencies to operate independently. But in difficult times, there is often a spontaneous coming together when a neighboring jurisdiction is in trouble. Such mutual aid is all the more important when everyone is in trouble – as is the case in 48 states with revenue shortfalls. Interdependence can be fostered through policies and budget directions that encourage and reward the sharing of common technology infrastructure and collaborative online service offerings.

### 9. Partner to Expand Capacity

Public entities have traditionally built up their own support structures to deliver services and meet their statutory mandates. Given the downward pressure of budget demands and the upward pressures of citizen needs and expectations, agencies are realizing that they can no longer do it by themselves. By pooling and sharing resources, neighboring agencies and jurisdictions are becoming partners. Likewise, private-sector vendors are partnering in earnest with public entities, particularly in arrangements where they share risks and rewards. Expanded use of cooperative public-private partnerships and other innovative networked solutions to meet public needs should be encouraged throughout government, to extend the benefits of learning and experience, save scarce budgetary dollars, drive efficiencies, improve performance, and realize the priorities of the administration.

#### 10. Reprioritize and Reinvest

Sustained revenue shortfalls in 48 states have prompted a hard look at what government does – and how it does it. The examination delineates between the core functions of government and the processes that have grown up around them. Creating a budget-conscious, results-driven culture of accountability requires performance management disciplines, a government-wide focus on innovative problem solving, thorough analysis of alternate strategies, economic justifications, cost-benefit analysis, and trade-offs in decision-making. In reprioritizing around the core functions – and streamlining or replacing tired old processes – governments are showing promise in meeting current budget needs while investing (even modestly) in the next generation.

This transition briefing is meant to be one part of the collective guidance that can assist governments in transition. Operating agencies and many third parties are weighing in on particular disciplines. The purpose here is to bridge those disciplines with a view of the intersection of government, technology and society.

Finally, if e-government was about improving service to the citizen, digital government is about meeting the citizen at work, at home and in the new public square by (or before) 2010.



LEADING FOR RESULTS, GOVERNING THROUGH TECHNOLOGY

It is not the critic who counts, not the man who points out how the strong man stumbled, or where the doer of deeds could have done better. The credit belongs to the man who is actually in the arena; whose face is marred by the dust and sweat and blood; who strives valiantly; who errs and comes short again and again; who knows the great enthusiasms, the great devotions and spends himself in a worthy course; who at the best knows in the end the triumph of high achievement, and who at worst, if he fails, at least fails while daring greatly; so that his place shall never be with those cold and timid souls who know neither victory or defeat.

- Theodore Roosevelt from Citizenship in a Republic (Paris Sorbonne, 1910)

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Table 4: Cost Per Unit of Service In Public Sector Services ..... 18

# THE NEW CIVIC ENGAGEMENT GOVERNING THROUGH TECHNOLOGY

Civic Engagement matters on both the demand side and the supply side of government. On the demand side, citizens in civic communities expect better government, and (in part through their own efforts) get it....

On the supply side, the performance of representative government is facilitated by the social infrastructure of civic communities and by the democratic values of both officials and citizens.

In the language of economics, social capital lowers transaction costs and eases dilemmas of collection action.... Light-touch government works more efficiently in the presence of social capital.... When community involvement is lacking, the burdens on government employees – bureaucrats, social workers, teachers, and so forth – are that much greater and success that much more elusive.

- Robert D. Putnam, Bowling Alone, 2000<sup>3</sup>

Digital government was born of the promise of public services delivered faster, better and cheaper. Indeed, the motivation – in large measure – was to increase convenience and choice for citizens and businesses, generate efficiencies for government, and mine costs out of existing processes so scarce public funds could be better used in supporting other priorities.

Given the choice, citizens use digital government. Almost half (43 percent) of Americans sought online government information or services in 2002, an increase of nine percent from the previous year.<sup>4</sup>

The challenge and opportunity for government is to turn information seeking into actionable information, resulting in people completing a transaction with government at a time and place of their choosing.

<sup>&</sup>lt;sup>3</sup> Robert D. Putnam, Bowling Alone: The Collapse and Revival of American Community, New York: Simon & Schuster, 2000, p. 346.

<sup>&</sup>lt;sup>4</sup> Taylor Nelson Sofres, Government Online: An International Perspective, November 2002.

Cable TV, television and radio took 10, 13 and 38 years respectively to reach the same mass acceptance that the Internet achieved in only five years. Digital government is also on pace to become a mass medium in less time than that taken by conventional media, but slower than the medium on which it rides - the Internet. (see Figure 1.)

#### **TECHNOLOGY ADOPTION CURVES**

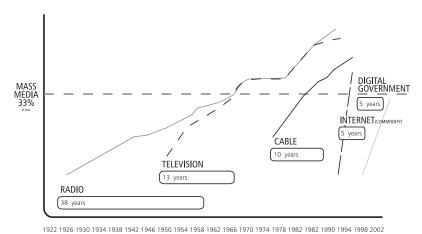


FIGURE 1: MEDIA ADOPTION RATES: BROADCAST, CABLE, INTERNET & DIGITAL GOVERNMENT

That is best measured through the adoption or take-up rate of online services. As the name suggests, adoption measures the usage of a particular delivery channel for a particular purpose. For example, if a third of all barbers use the Internet to renew their state licenses each year, the adoption rate of that online application would be 33 percent. That is an important number. It is the benchmark for the status of mass media.

ONLINE SERVICE	AVERAGE (N)	NATION LEADING STATES
Business Registration Renewal	32% (7)	75%
Business Registration (Initial)	28% (9)	70%
Business Licensing	30% (5)	67%
Vital Statistics	29% (8)	75%
Professional License Renewal	20% (8)	34%
Campsite Registration	20% (7)	38%
Business Tax Filing & Payment	8% (11)	36%
Individual Tax Filing & Payment	15% (8)	15%
Vehicle Registration	17% (12)	38%
Driver License Renewal	6% (11)	12%

Source: Center for Digital Government, 2002

TABLE 1: ANNUALIZED ONLINE ADOPTION RATES

A definitive view is illusive because only a minority of states track the adoption rates of their digital government applications. Those that do track adoption provide important insight into public and government behavior. (See Table 1.)

#### ADDPTION RATES

On average, four of the 10 most common digital government services identified by the Center for Digital Government are at or nearing the important mass media benchmark. Moreover, leading states have met or exceeded the benchmark in eight categories.

#### THE TAKE AWAY

These trends point to the importance of:

- Shared technology services and infrastructure, which can support numerous applications at once and handle a rapid rise in the use of one or all of them.
- Adoption incentives, which make the online experience more convenient, faster and less expensive for users who would otherwise do business with government over the counter, through the mail or on the phone. Adoption is ultimately tied to user value and whether it is sufficiently compelling to cause people and business to make the switch.
- Purposeful promotion, which gets the word out about online services combining existing communications (newsletters, renewal notices, envelope stuffers, waiting-room signage) with new campaigns (public service announcements and advertising).

#### The Path Forward

The next step is not simply to finish the buildout of online applications or the infrastructure that supports them. Both are necessary but not sufficient in governing effectively in the 21st century.

The demands of governing, of course, will not allow public agencies to catch up before introducing surprises and new challenges. Such challenges require of government a quality that might best be called institutional improvisation, a capability that includes but is not limited to what we have conventionally understood as digital government. Improvisation presses to the edges the deliberative nature of the legislative and executive branches of government, underscoring the importance of clear policy direction and innovation-minded leadership.

Capital campuses are home to institutions born of the Constitution, which is the original covenant that bound together a geographically defined community of communities. It is uniquely American that state capitals are typically not found in the largest population centers, meaning that most of the country is governed from the periphery.

Given that structure, governments have built a network of brick-and-mortar outposts in communities across the state, while preserving control at the headquarters, as is frequently required by state constitutions. As we contemplate the future of governance, the historic role of governing from the periphery may more naturally and more effectively be done via computer networks.

#### EFFICIENCY, EFFECTIVENESS, AND ENGAGEMENT

Seen in that light, digital government is the means to a larger end – digital governance. Figure 2 illustrates the wider landscape – and the impact of digital government and digital governance on the core functions and capacity of government.

# Digital Governance

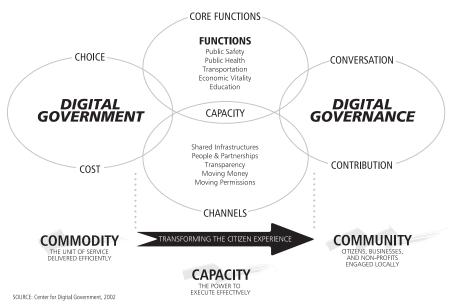


FIGURE 2: A MODEL OF GOVERNING THROUGH TECHNOLOGY

Since its inception, the central theme of digital government has been transforming the citizen experience. The chronology of digital government's development tracks with a left-to-right scan of Figure 2. In the initial wave of activity, the focus was on delivering information and services as a commodity – consistently and uniformly (digital government) – while only hinting at the possibilities of the new online civic engagement (digital governance). As we move into the second wave on the strength of the work done in the early years, we are now able to focus more fully on using the capacity of digital government in the act of digital governance where citizens, businesses and non-profit organizations engage locally. The promise remains to turn government to face the citizen. Digital government is citizen-centric, digital governance is citizen-powered.

Beginning with the earliest e-government experiments, the original drivers have been expanding citizen convenience and choice, while allowing the government to reduce costs of existing processes. Digital government includes the service offerings discussed above – routine transactions in which the individual is seen primarily as a customer and the service is seen primarily as a commodity. Digitally delivered units of service have advantages for provider and consumer alike – information and service delivered consistently, reliably, quickly and cost-effectively. Growing use or adoption of online government indicates that the Internet helped deliver those services in a way that citizens and businesses wanted them.

Moving people from "in line" to "online" expanded the capacity of government. The migration by government to Internet architectures and infrastructure extended the value of the mission-critical systems that support the core functions of government. Government's capacity has conventionally been defined in terms of human and physical resources, supported by a patchwork of technologies that have grown up around various processes.

Many of the core functions of government rely on moving money and moving permissions in substantial quantities. Paper processes are ubiquitous in government because, in large measure, the printing press has had a 500-year head start in reshaping the world around itself. Moving money and permissions are done more naturally and more cost-effectively in a bit-based environment than an atom-based world.

The Internet brings commonality to existing technical infrastructures while extending their value by new channels for conducting the people's business in new ways. Governments have statutory responsibilities to conduct themselves in the 'sunshine,' a colloquial reference to public disclosure and public meetings laws. The portal, related Web properties, and the state or local public affairs cable television channels enable government to be transparent – that is, meeting the letter and spirit of disclosure laws – in ways that were not imagined when the requirement was codified.

Taken together, these changes set the stage for what is next – digital governance. While digital government reaches from government to communities, digital governance is rooted in the life of communities – reinvigorating the public square through technology. A number of observers attributed the change in the public priorities dating from September 11, 2001, a catalyst for an anticipated reversal of the purposeful isolation that had characterized the closing decades of the last century.<sup>5</sup>

A month after the November 2002 election, USA Today captured this trend with a cover story under the descriptive headline, "More Americans put families ahead of

<sup>&</sup>lt;sup>5</sup> Joel Kotkin, The New Geography: How the Digital Revolution is Reshaping the American Landscape, New York: Random House, 2000.

work: Priorities shift because of slow economy and 9/11." Changes in geopolitics, technology and the economy have been instrumental in connecting people back into local communities, shifting the focus from Wall Street to Main Street and the town hall in the renewal of "civic engagement" by those who live in the community. Ironically, 40 percent of states have, on the advice of counsel, developed intended-use policies for their portals that specifically define them as being for official purposes only, not a virtual public square. To meet the expectations of digital governance, there is growing experimentation with so-called democracy portals, community-based initiatives that provide what government portals did not – a public forum.

Three-quarters of Americans are looking to the Internet to communicate with government (72 percent) and find information (75 percent) in ways that are easy (72 percent) and convenient (70 percent). Fully 77 percent of Internet users believe digital government is a high priority, as do 73 percent of all adults. Remarkably, even two-thirds (67 percent) of non-Internet users put a high priority on digital government.<sup>8</sup>

There is also anecdotal evidence of citizens using the instruments of digital government in attempts at digital governance. For example, people are using pothole-repair websites to provide input into a discussion of transportation policy or budget priorities. Faced with this apparent mismatch, jurisdictions are finding ways to triage such input – routing it from operational staff to the policy or executive office. There is also a recognition that such a scenario should not be viewed as a mismatch, and that such input is ignored at government's peril. Rather than viewing sophisticated customer relationship management (CRM) systems as a means to track pothole repairs, perhaps CRM's greater value is to manage government's conversation with citizens about the future of their respective communities. A timely and responsive interaction with government on issues of interest and concern can help get and keep citizens engaged and contributing to the life of the community.

The reports from the front lines indicate that the new civic engagement is real, and can come with a bit of an edge. The tens of thousands of e-mail messages received by agencies and elected officials is a preview of contemporary civics – immediate input with the expectation of response. While the form letter has found its way to the Internet, growing numbers of people are taking the time to enter policy discussion on matters of concern in local communities. E-mail often differs in tone, urgency and immediacy from more formal correspondence – and is written by people who are unlikely to attend a public meeting. There is an understandable tendency within government to see the growing volumes of e-mail messages as additional workload. But there is a larger consideration – people want access to the public discussion, often on their own terms.

<sup>6</sup> Robert D. Putnam, Bowling Alone: The Collapse and Revival of American Community, New York: Simon & Schuster, 2000, p. 346.

<sup>&</sup>lt;sup>7</sup> Center for Digital Government, Digital State 2002.

<sup>&</sup>lt;sup>8</sup> Hart-Teeter and Council for Excellence in Government, E-Government: To Connect, Protect, And Serve Us, 2002.

#### THE TAKE AWAY

These trends suggest:

- Citizens are choosing the channel: Historically, government has defined the time, place and means of contact with citizens and business. Time and distance is disappearing, and interactive technologies are putting citizens in charge of the conversation. They are accustomed to self-service they like it, and they are using it in increasing numbers.
- The action is at the edges: Power is shifting from the center to the periphery, from the capital to communities. The new capacity and reach provided by digital government allows government to meet citizens where they live.

# The Next Chapter in the Life of Communities

The hard work of transforming government functions through technology is weightier than the infrastructures (conceptual, political and technical) created to support initial forays into electronic government. Everything "e-" – the once ubiquitous prefix for commerce, business, learning and government in the much-ballyhooed new economy – lacked the heft to deliver on its promise. The term digital government allowed for a more comprehensive view of governing through technology, but, if the act of governing is the central issue, then perhaps digital governance would focus our attention on the larger, more significant task. The ability to do the public's business and earn the public trust requires a new understanding of the interface between citizens and the act of governing.

The words we use are helpful in understanding where we are – and where we're going. During the initial dot-com excitement, "e-" was a popular prefix. Now, language in common usage suggests that some things are winding down; clearing the way for what comes next. For example, consider how the term "post-9/11" is now part of our vocabulary.

In accepting the 2002 Rudolph W. Giuliani Leadership Award, New York Finance Commissioner Arthur Roth used language that has, regrettably, fallen out of common usage in this country. He accepted the award on behalf of those who "ministered to the physical and financial needs" of the people of New York before and after the skyline changed. Commissioner Roth believes the post-9/11 environment has reminded us that, at its core, "government needs to serve."

Three other "posts" related to the presence of technology in our lives underscore that same need – post-boom, post-nomadic and post modern – the long term impacts of which on governing, while profound, have gone with comparatively little comment.

<sup>&</sup>lt;sup>9</sup> Arthur Roth, Prepared remarks on the receipt of the Rudolph W. Giuliani Leadership Award at the 2002 New York State Executive Leadership Institute, Fort Orange Club, Albany, NY: September 23, 2002.

Post-boom is the generation that has grown up in households where PCs were just another appliance. For them, the Internet is their first choice for commerce, conducting research and connecting with a sense of community. Significantly, the first wave of this demographic cohort became eligible to vote at the turn of this century.

Joel Kotkin and Susanne Trimbath, writing in the Los Angeles Times, identify the current era as post-nomadic – noting a return home for those who had been distracted from the priorities of "family, faith and community." It follows that they are much less likely to cede decision-making about these rediscovered priorities to unseen civil servants or even elected officials operating outside of public view. Moreover, post-nomadics see network connectivity as a utility. They have embraced the Internet as the power behind the newest generation of labor-saving and other gadgetry in good times – and, more significantly, turn to it to check on the safety of loved ones in times of emergency. They expect the Internet (and the online government services that ride on it) to have the availability and reliability of electricity and tap water.

The third constituency is made up of post-moderns, an increasingly active segment of the public who have become disenchanted by the limitations of the modern era – including declining trust in institutions and the perceived excesses of global capitalism. The most vocal have taken to the streets of Seattle, Quebec City and Washington, D.C., in protest, but there are larger numbers active online in communicating, organizing and agitating around ideas that are important to this community. Importantly, as their actions suggest, they view the Internet as the last best chance for democratic renewal of America's republican institutions.

Post-boomers, nomadics and moderns will undoubtedly bump into each other in the electronic public square while contending for what may ultimately be irreconcilable world views. The hopeful and compelling sign is that they are all nesting in a networked world. In the main, they share a sophisticated view of the Internet – using it for communication, commerce, creating community, and more than a little agitation. Government fails to at least match that level of sophistication at its peril. The other caution is to these constituencies themselves, recognizing that such democratic empowerment may conflict with the republican design of the Constitution unless all parties can agree on those things which remain self-evident.

Kotkin, Putnam and other observers believe that the label "post" is a sure sign of a new "pre" in the making – making now the time to prepare to influence the next chapter in the life of the country. There is a growing consensus that we need to transcend the technology, people, processes and functions of government to focus on the highest stakes civil prize of them all – an idea. Namely, the idea of a participatory, representative democracy. It's a central idea and expectation of a citizen in 2010.

<sup>10</sup> Joel Kotkin and Susanne Trimbath, "Behold the Post-Nomadic Economy," Los Angeles Times, August 8, 2002.

# PURPOSE-DRIVEN GOVERNMENT

(Analysis and Context)

#### RENEWING CORE FUNCTIONS

overnment in the United States is built on 226 years of history and tradition. The processes that grew up around that rich history first confronted automation some four decades ago. Long-established practices make government particularly prone to the *Innovator's Dilemma*<sup>11</sup> – Clayton Christensen's formulation that good organizations tend to gravitate toward enabling technology while often missing the impacts of disruptive technologies. The former allows for incremental improvements of existing processes while the latter – as the name suggests – disrupts tired old processes in favor of a change in the order of things.

Christensen assesses no blame for the lack of appreciation for disruptive technologies, noting that good managers earn that reputation by dedicating themselves to keeping organizations running smoothly – not breaking them. Yet, Christensen warns of external disruptive forces that abhor the status quo the way nature abhors a vacuum. His conclusion has been popularized in a single sound bite – "cannibalize yourself before someone else does."<sup>12</sup>

The shift from commodity to community, coupled with structural difficulties in state budgets, forces a careful reexamination of the core functions of government. It is useful to differentiate the finite number of core functions from the hundreds of processes that have grown up around them. These processes are at the heart of the innovator's dilemma, where the exclusive focus is on incremental improvements of existing processes through enabling technologies. In contrast, a functional focus allows for the possibility of transforming or even eliminating dated processes during a disruptive moment.

The continuing state revenue shortfalls represent just such a disruptive moment – during which changes that would have been impossible during good times, are now seen as necessary and even inevitable.

More than at any time in the last 30 years, the investment and policy decisions made in the next 12 months will determine how government navigates through rough weather – and how healthy it is when the storm clears.

<sup>&</sup>lt;sup>11</sup> Clayton M. Christensen, *The Innovator's Dilemma: When New Technologies Cause Great Firms to Fail*, Boston, Massachusetts, Harvard University Press, 1997.

<sup>&</sup>lt;sup>12</sup> Jerry Useem, "Internet Defense Strategy: Cannibalize Yourself," Fortune, September 6, 1999.

There are purposeful decisions to be made about how best to use the new capacity of digital government – whether to expand the range of government activities, improve the existing range of services or provide a platform for overhauling the way government works in light of growing demand for services and shrinking receipts.

The sustained revenue shortfalls have prompted a careful re-examination of what government does – and what it may choose to no longer do. The emerging priority is to do the right things, and do them well. One state has reduced its list to only three core functions – educate, medicate, incarcerate – which, not coincidently, account for 83 percent of its general fund budget.

While by no means an exhaustive list, the trio is broad enough to include the post-9/11 confluence of public safety, public health, transportation, and critical infrastructure protection in the name of safe communities and homeland security. All of that requires economic vitality, which naturally raises economic policy to the level of a core or an inherently government function (IGF).

The federal government defines IGFs as a "function that is so intimately related to the public interest as to require performance by ... government employees." That is, those things that only government can do. Like the role of government in society, the definition of IGF is not static. Congress has seen it necessary to clarify and adjust the definition at least three times in the last decade.<sup>13</sup>

The key characteristics of an inherently governmental function include:

- Strategic planning: vision, goals, desired outcomes, initiatives
- Defining performance metrics: goals, targets, schedules, collection and reporting processes
- Budgeting and allocation of resources: for strategic initiatives
- Policy setting: standards, policies, procedures and guidelines
- Evaluating vendors for specific mission tasks, benchmarking
- Defining security and data-access policies
- Mediating disputes between private parties
- Defining common operating environments for interoperability.

These characteristics are consistent with the proper management and oversight of the state's information technology (IT) program. However decentralized and federated, it is useful to see the computing and telecommunications resources of the state as a whole or – to use a term popular in the industry – as an enterprise.

#### MANAGEMENT DISCIPLINE

The enterprise IT program includes the network and every piece of technology that is connected to it. The program also includes the thousands of IT professionals who design, build, maintain and enhance the systems on which government relies –

<sup>&</sup>lt;sup>13</sup> Government Performance and Results Act (1993), Clinger-Cohen Act (1996), and Federal Activities Inventory Reform (FAIR) Act (1998). See also Office of Management and Budget (OMB), Circular A-130: Management of Federal Information Resources.

together with specialized expertise and operational assistance from the private sector. An enterprise IT program typically includes some level of shared technology services that are used by the family of agencies. The enterprise is often defined in policy – as are standards and architectures that encourage or require agencies to operate and develop applications and infrastructure in a common, consistent way.

Taken together, an enterprise IT program represents a significant investment. On average, states invest approximately four percent of the general fund budget in information technology – a number that rises in more decentralized environments that do not enjoy the benefits that come through standardization and the attendant savings in support costs. Moreover, an enterprise approach requires new investments fit into an overall IT portfolio, not merely solve a single problem. Finally, an enterprise view of a state IT program runs counter to a natural tendency to proliferate and duplicate efforts and infrastructure.

#### THE TAKE AWAY

An enterprise IT program is created deliberately and by design, and is characterized by:

- Strong executive leadership at both the enterprise and agency level
- **Broad vision of the possibilities,** with a tactical plan that holds agencies responsible for results
- Governance and management system that sustains drive for changing the way government works
- Process transformation that rewards risk taking and innovation
- **Singular focus** on the citizen as the common decision point in initiating, designing, and deploying technology that supports and powers public service
- Supportive public policy that provides direction on security, privacy and investment decisions.

# METRICS THAT MATTER AND THE VALUE PROPOSITION

The social benefits of public-sector IT are real and demonstrable, but not easily or consistently quantifiable. With continuing revenue shortfalls, there is an urgent focus on hard-dollar savings that can be captured and redirected toward higher priorities. Such is the promise of public sector IT – a promise that is being realized in the work of government across the country. Consider the following cases:

#### INCREASED CAPACITY AT INCREMENTAL COST

Through a new customer relationship management (CRM) system, Kansas is now handling an increase of approximately 93 percent in the volume of initial unemployment claims over the last two years – 20,000 of them originating on the Internet. Processing time is down 76 percent with the new system, and waiting times have

fallen 83 percent – down from 30 to just 5 minutes. These results were produced at incremental cost – a 10 percent increase overall.<sup>14</sup>

# FRAUD DETECTION AND INCREASED REVENUE COLLECTION

A fraud and abuse detection system implemented for the Texas Medicaid program has exceeded the legislative targets for identifying misused funds by 217 percent. Similar systems are in place in Kansas and Oklahoma.<sup>15</sup>

#### DELIVERING VALUE

The adoption rates detailed earlier are dependent on providing a compelling user experience and the availability of self-service in the first place. In terms of the experience, as people are continuing to "nest" in a networked world and conduct more activities using new channels, enhancing government's customer care capabilities will be vital to meeting increasing citizen demands, needs and expectations.

The question of availability points to the unfinished business in the initial buildout of digital government applications. Among the 10 most common online services identified by the Center for Digital Government, only four are widely implemented across the 50 states (See Table 2).

#### **IMPLEMENTATION RATES**

COMMON APPLICATIONS	FULL IMPLEMENTATION
Online Job Search	98%
Unclaimed Property Search	96%
Legislation Tracking	94%
College Admissions	94%
Court Decision Look Up	70%
Sex Offender Look Up	68%
Vital Records	68%
Professional Licensing Look Up	62%
Business Tax Filling	58%
Business Licensing Look Up	56%

Source: Center for Digital Government, 2002

TABLE 2: THE MOST WIDESPREAD ONLINE APPLICATIONS BY STATE GOVERNMENTS

<sup>14</sup> Accenture

<sup>15</sup> EDS

#### IMPLEMENTATION RATES

Obviously, citizens and businesses cannot adopt online services that do not exist. However, with the increased competition within government for scarce taxpayer funds, is it worth finishing the buildout of online services? The answer is in the hard dollars. The early evidence was in the private sector, as service industries added an Internet channel to conventional service delivery means. The savings on a cost per unit of service ranged from 50 to 98 percent in industries studied by the Organization for Economic Co-operation and Development (See Table 3).

#### **COST ADVANTAGES - PRIVATE SECTOR**

SERVICE	CONVENTIONAL CHANNEL	INTERNET CHANNEL	PERCENTAGE SAVINGS
Airline Tickets	\$8.00	\$1.00	87%
Banking	\$1.08	\$0.13	89%
Bill Payment	\$2.75	\$0.85	70%
Term Life Insurance Policy	\$400 - \$700	\$200 - \$350	50%
Software	\$15.00	\$0.35	98%

Source: Organization for Economic Co-operation and Development (OECD), 2000

TABLE 3: COST PER UNIT OF SERVICE IN PRIVATE SECTOR SERVICES

The cost per unit of service demonstrates the financial advantage of Internet-initiated transaction for government – ranging from 7 to 95 percent according to new data from the Center for Digital Government (See Table 4).

The power of "and" in digital government is compelling. The combination of high implementation rates on the supply side, high adoption or take-up rates on the demand side, coupled with a markedly lower cost per unit of service comes at an important moment. It is the cheaper, scalable channel – providing affordable capacity at a time when government is buffeted by short dollars and long demand.

#### **ONLINE COST ADVANTAGES - PUBLIC SECTOR**

ONLINE SERVICE	CONVENTIONAL CHANNEL	INTERNET CHANNEL	PERCENTAGE SAVINGS
License Lookup & Verification State of Utah	\$20.00	\$5.00	75%
Vehicle Registration State of Maine	\$3.50	\$1.75	50%
Driver License Renewal State of Tennessee	\$8.48	\$3.01	36%
Uniform Commercial Code (UCC) Fillings State of Kansas	\$15.00	\$5.00	66%
Income Tax Fillings State of Tennessee	\$3.41	\$3.16	7.4%
Health Licensing Renewal State of Tennessee	\$8.17	\$7.94	2.82%
UI Initial Claim Filling State of Kansas*			95%

Source: Center for Digital Government, 2002 and \*Accenture

TABLE 4: COST PER UNIT OF SERVICE IN PUBLIC SECTOR SERVICES

#### THE TAKE AWAY

These trends suggest:

- Scalable capacity counts, increasing service-delivery capacity at only incremental cost
- Government can get more of what it is owed, by reducing fraud and increasing revenue collection (without raising taxes)
- The benefits of the cheaper channel. Implementation + adoption costs mined out of existing processes = taxpayer value.

### To those about to lead...

For all its advantages, digital government is not a silver bullet. In fact, it gets harder from here. The policy, operational and technological issues grow more complex as the journey continues into the inner workings of government. Add a soft economy, arcane tax structures and uncertain geopolitics, and public officials might feel like their backs are against the wall.

That is exactly the position that a former industrialist found himself in a decade ago as head of an old-line technology company that, in 1992, was confronted by the shock of the new. His reflections on the organization's subsequent turnaround are instructive to public sector leaders as they confront hard and potentially unsettling decisions, "The hard part isn't getting started. The hard part is seeing the changes through until you achieve the goal." <sup>16</sup>

<sup>&</sup>lt;sup>16</sup> Louis V. Gerstner, Jr., Who Says Elephants Can't Dance?, Harper Business, 2002.

# TOWARD 2010

(Call to Action)

#### TOWARD PRIORITY-DRIVEN RESULTS

A decade after the commodity Internet captured the public imagination, the intersection of government and technology remains a hopeful force in a challenging environment.

On the Internet, nobody knows you're a small state.<sup>17</sup> That idea is reflected in five years of data from the Digital State, the survey of record in state use of technology, administered jointly by the Center for Digital Government and the Progress and Freedom Foundation. Since 1997, Digital State has tracked rapidly maturing state practices in using the Internet in key areas of government – public safety, public health, open government and disclosure, taxation and revenue, management and administration, and transportation.

States of all sizes, geographies, and populations have used the Internet in service to the citizen, to businesses within their borders, within government, and among neighboring public entities. Interestingly, in reviewing the five-year performance on the Digital State survey by population, medium-sized states have out-performed all others. In focusing on the top five states in each of three population categories, the largest states lag both medium and small states (see Figure 3).

#### DIGITAL STATE

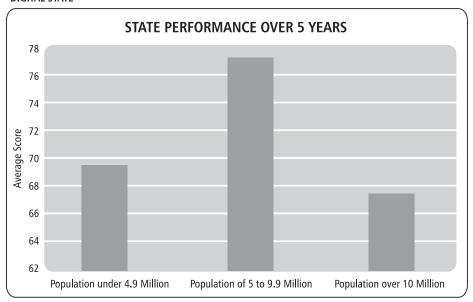


FIGURE 3: DIGITAL STATE PERFORMANCE BY POPULATION (Top 5 per category)

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<sup>&</sup>lt;sup>17</sup> A decade-old *New Yorker* cartoon featuring two canines in front of a computer illustrated the equalizing and transforming potential of the new medium with the caption, "On the Internet, nobody knows you're a dog." (*The New Yorker*, Vol.69, LXIX, no. 20, p. 61, published on July 5, 1993).

The results point to both the challenge of changing the direction of large ships of state, and the opportunity for smaller jurisdictions to use technology - particularly the Internet - to transform historic disadvantages into competitive advantages.

The ship of state alters course deliberately. This briefing concludes by picking up where the Top 10 left off – with recommendations that anticipate the future, and attempt to work backward from there by defining policy and investment choices that can help move government where it needs to be – and citizens say they want to be – by 2010.

# Reverse History

What if the Internet and the printing press had changed places in history? Paper processes are ubiquitous in government because, in large measure, the printing press has had a five-hundred year head start in reshaping the world around itself. The Internet represents no less an inflection point than Johann Gutenberg's invention, yet we have only begun to see its effects. Consider that the two things that government does in huge volume – moving money and issuing permissions – are more effectively done in a bit-based world than the atom-based world. Seen this way, digital technologies correct a historical accident by disintermediating an unnecessary layer of cost – paper and the structures that support its processing and storage.

# Sunset Everything and Sunrise New Things

Thomas Jefferson cautioned that the "dead hand of the past" should not control those alive today. The underlying question of sunset reviews is a sound and helpful one - does it still make sense to do things this way? Where new initiatives are concerned, an equally important question applies – does it make sense to do it this way, or at all? Many worthy initiatives remain in place over time, other initiatives run their course and are properly retired or replaced, and still others only seemed like a good idea at the time. The sunset approach is helpful in working through the polarized debate about whether digital government is the new mainstream for service delivery (at the expense of some conventional means) or only another channel (additional capacity for which there are no countervailing savings). So sunset everything including the Internet channel – but do it in order of appearance. Take a hard look at the mature channels first, including their continued viability on this side of the Internet inflection point. Electronic channels warrant scrutiny too – and should be compared to the incumbents on metrics that matter (including but not limited to the cost per unit of service). Such reviews will validate the keepers, provide the basis for adjusting the service delivery mix, and help prioritize technology investments moving forward.

# Establish Metrics that Matter and a Sustainable Funding Model

Focus on results, and develop new metrics that reflect the priorities of the administration and the expectations of the public. Hold agencies responsible for implementation and decommissioning of delivery channels, creating incentives to increase adoption of lower-cost channels, and optimizing the cost and effectiveness of government. Determine how to best fund digital government, with a model that will be successful in the long run and can support the priorities of the state IT program.

#### Focus on the Cost of a Unit of Service

A project to transform a paper-based process comes with a visible price tag, in contrast to the costs of that which it would replace. The existing process is not free, but its costs have long since incorporated here and there. The status quo appears to be the less expensive – and therefore obvious – choice. Those assumptions are worth testing by shifting the view from total program cost to the cost per unit of service. The unit of service measure matters, especially as governments anticipate increasing demand for public services. Digital service delivery scales more effectively than conventional channels, and at a fraction of the cost per transaction.

# Prepare for Utility or Shared Services Computing

Shared environments are the new ground zero for regional, cross-jurisdictional collaboration. Hosted by both public- and private- sector entities, full service or a la carte, dramatically realigns IT investments to support core government functions.

# Affirm IT Security as a Cost of Doing Business

The objective is clear: No loss of vital public services or public accountability. Long the unpaid bill of the public-sector IT community, IT security is now a prerequisite to conducting the core functions of government in a networked world. It includes but is not limited to establishing sustained funding, appointing a chief information security officer, requiring regular security audits across state government, and joint security-privacy impact statements for new initiatives.

#### Don't Settle for Best Practices

Many states have had innovations recognized as a best practice by a number of third parties. That's good because there is no need to reinvent solutions already thought through and implemented by neighboring jurisdictions. But the conventional wisdom about best or emerging practices can reinforce a risk-adverse culture, at a time when considered risk is necessary to survive and thrive in a challenging environment. Be deliberate in creating opportunities for public servants who are not

content to implement someone else's solution. Harness the collaborative potential of public-private partnerships and the technical, program, and policy staffs who are driven by a sense of their own legacy – inventing part of the future by using new means to address nagging business problems that had, to that point, defied solution.

# Look Beyond the Desktop

Much of digital government has been focused on changing the experience to desktop PC. An architectural view of digital government, supported by a nimble and robust infrastructure, allows government to securely deploy actionable information where and when it is needed. The new channel mix includes wireless mobile devices, e-mail, and the Web – all of which integrate with call centers and face-to-face field service.

# Use Analog Values to Shape a Digital Future

The state portal and related Web properties may be the only seat of government that many citizens ever know. Public service is enjoying renewed popularity and respect at the moment, and justifiably so. But that respect has to be earned over and over again, and is won or lost with each interaction between citizens and their government. It is sobering to walk the halls of state capitols. The architecture, the statuary, the inscriptions all reflect the aspirations of the people who dared to carve their values and dreams into stone. The permanence, the elegance and the grandeur of these public spaces may point out a faulty design assumption in much of what has been built in the government Internet space to date — we dream too small.

### Invest

The initial campaign for digital government relied on bootstrapping initiatives and leveraging existing resources. Those efforts alone will not produce the robust and nimble capacity needed by government and expected by the public. Moving forward, budget writers will need the courage to do the right thing – even when it comes at a cost to existing programs. That can only happen in an environment of full disclosure. These efforts are expensive. The work is hard and unpredictable. Upfront transparency about the total cost of ownership will allow informed decisions.

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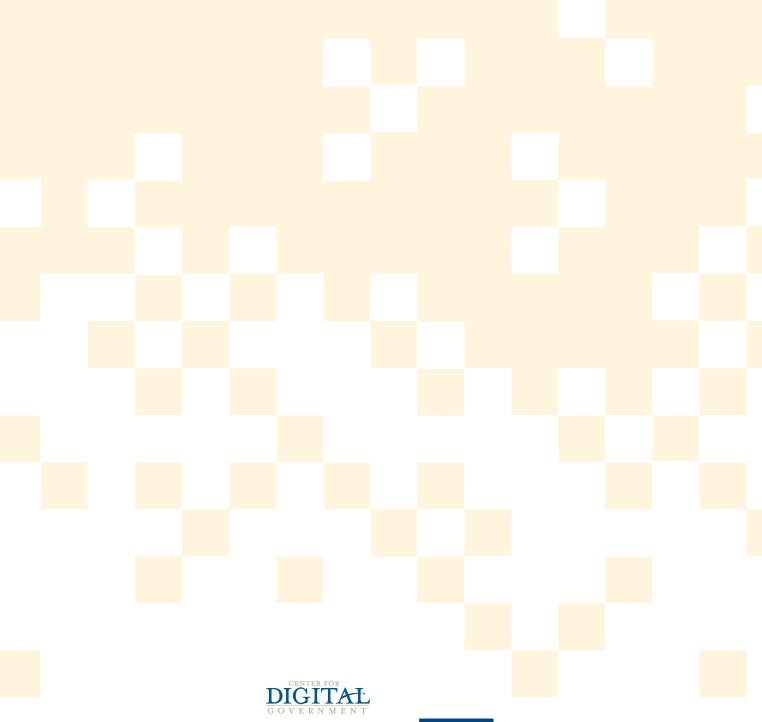
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